

**ROD-IN-TUBE OPTICAL FIBER PREFORM ASSEMBLY
AND METHOD HAVING REDUCED MOVEMENT**

Abstract of the Disclosure

Embodiments of the invention include an optical fiber preform assembly and a method for making optical fiber using the preform assembly. The assembly includes a
5 preform core rod, at least one overclad tube formed around the preform core rod, a handle attached to one end of the overclad tube, and a refractory material positioned in the overclad tube between the preform core rod and the handle. The refractory material reduces if not prevents movement of the preform core rod into the handle during the fiber draw process. Preferably, the refractory material is made of, e.g., magnesium oxide
10 and/or aluminum oxide, and has a melting point, e.g., greater than approximately 2000 degrees Celsius. Embodiments of the invention also include a method for making optical fiber using this preform assembly.